

Amendments to the Specification

Paragraph beginning on page 1, line 8

Currently, there is a growing trend to converge voice and data networks so that both utilize the same network infrastructure. The currently available systems that combine voice and data have limited applications and scope. An example is Automatic Call Distribution (ACD), which permits service agents in call centers to access customer filed files in conjunction with incoming telephone calls. ACD centers, however, remain costly and difficult to deploy, requiring custom systems integration in most cases. Another example is the voice logging/auditing system used by emergency call centers (e.g., 911) and financial institutions. Deployment has been limited due to the limited scalability of the system since voice is on one network and data is on another, both tied together by awkward database linkages.

Paragraph beginning on page 1, line 17

The aim of IP telephony is to provision voice over IP based networks in both the local area network (LAN) and the wide area network (WAN). Currently, voice and data generally flow over separate networks, the goal is to transmit ~~them~~ both of them over a single medium and on a single network.

Paragraph beginning on page 3, line 11

Attached video equipment 66 includes any type of video equipment, such as cameras and monitors including their control and selection, and various video processing equipment. Attached audio equipment 70 includes devices such as those providing voice activation sensing, microphones, loudspeakers, telephone instruments and microphone mixers. Data applications and associated user interfaces 72 such as those that use the T.120 ~~real-time~~ real-time audiographics conferencing standard or other data services over the data channel. The attached system control and user interface 74 provides the human user interface for system control. The network interface 68 provides the interface to the IP based network.

Paragraph beginning on page 3, line 25

The audio codec 54 functions to encode audio signals from the audio source (e.g., microphone) for transmission over the network and to decode the received audio data for output

to a loudspeaker. All H.323 audio terminals must be capable of encoding and decoding speech in accordance with G.711 including both A-law and ~~i-law~~ μ-law encoding. Other types of audio that may be supported include G.722, G.723, G.728 and G.729.

Paragraph beginning on page 3, line 30

The data channel supports telematic application such as electronic whiteboards, still image transfer, file exchange, database access, ~~real-time~~ real-time audiographics conferencing (T.120), etc. The system control unit 56 provides services as defined in the H.245 and H.225.0 standards. For example, the system control unit provides signaling for proper operation of the H.323 terminal, call control, capability exchange, signaling of commands and indications and messaging to describe the content of logical channels. The H.225.0 Layer 64 is operative to format the transmitted video, audio, data and control streams into messages for output to the network interface. It also functions to retrieve the received video, audio, data and control streams from messages received from the network interface 68.

Paragraph beginning on page 4, line 11

Note that since the digitization format for voice on the IP packet network is often different than on the PSTN, the gateway needs to provide ~~this type a form~~ of conversion that is known as transcoding. Note also that gateways also function to pass signaling information such as dial tone, busy tone, etc. Typical connections supported by the gateway include analog, T1, E1, ISDN, frame relay and ATM at OC-3 and higher rates. Additional functions performed by the gateway include call setup and clearing on both the network side and the PSTN side. The gateway may be omitted if communications with the PSTN is not required.

Paragraph beginning on page 5, line 25

RTP is intended to be flexible so as to provide the information required by a particular application. Unlike conventional protocols in which additional functions may be accommodated by making the protocol more general or by adding an option mechanism that ~~required~~ requires parsing, RTP can be tailored through modifications and/or additions to the headers.

Paragraph beginning on page 7, line 4

An endpoint joins a zone via the registration process whereby it informs the Gatekeeper of its Transport Addresses and one or more associated alias addresses. Note that registration must take place before any calls are attempted. When endpoints are powered up, they look on the network for the Gatekeeper and once found, they register their TSAP and one or more aliases with associated therewith.

Paragraph beginning on page 8, line 2

The present invention provides an apparatus for and a method of simulating the functionality of the gatekeeper in a LAN telephony system. In LAN telephony systems being developed today and most likely in convergent systems developed in the future, the gatekeeper is the central entity. Therefore, the gatekeeper is simulated in order ~~the fully test that~~ the behavior of the gatekeeper and all entities attached to it or that communicate with it are fully tested under all possible scenarios. The gatekeeper simulator of the present invention ~~permits~~ enables tester personnel ~~manual to manually~~ control of the behavior of the gatekeeper and its environment.

Paragraph beginning on page 8, line 16

The gatekeeper simulator is adapted to simulate any desired request supported by the H.323 protocol suite. In addition, it is adapted to simulate all possible responses to a request as well. Further, it is adapted to simulate the responses selectively and individually for each specific user users in the network. In addition, the simulator comprises a pre-programmed address translation table (i.e. IP phone table) that can be configured and programmed by a user to contain the same information it would have contained as a result of IP phones having been registered.

Paragraph beginning on page 13, line 11

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all possible scenarios. The simulator of the present invention ~~permits~~ enables tester personnel to have manual control of the behavior of the gatekeeper and its environment.

Paragraph beginning on page 15, line 11

5. Handling a request to open an H.245 channel with another user.

Paragraph beginning on page 15, line 20

The above transfer requests are example cases wherein control in the LAN telephony system ~~passed~~ passes through the gatekeeper. Note that the voice path itself does not normally pass through the gatekeeper but is sent directly between the users.

Paragraph beginning on page 16, line 1

The gatekeeper simulator of the present invention is adapted to simulate numerous scenarios including but not limited to (1) rejecting the registration from a user, (2) accepting the registration from a user, (3) rejecting the de-registration from a user, (4) accepting the de-registration from a user, etc. The rejection may be for any reason supported by the H.323 protocol suite, all of which are supported by the gatekeeper simulator.

Paragraph beginning on page 18, line 19

The specific actions residing in the user specific action script database can be programmed by a user via the user interface 122. A programmed action can be (1) any desired action such as the generation of an event message or can be (2) adapted to trigger a new event. If the action is an event message, the message is retrieved from the action script database and forwarded to the event processor 106 for transmission onto the LAN. The event processor generates a message conforming to H.323 protocol ~~standard~~ standards and inserts the appropriate values for the fields, i.e. source and destination IP address, etc. in accordance with the desired action.